



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Metropolitan Boston – Northeast Regional Office

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Acting Commissioner

MODIFIED WATER WITHDRAWAL PERMIT
MGL c 21G

This Modified Permit is issued pursuant to the Massachusetts Water Management Act ("the Act") for the sole purpose of modifying the terms and conditions governing the withdrawal of water authorized herein. This Modified Permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

PERMIT NUMBER: 9P-3-17-071.01

RIVER BASIN: Ipswich

PERMITTEE: Town of Danvers
Town Hall, Sylvan Street
Danvers, MA 01923

ORIGINAL ISSUANCE DATE: February 15, 1991

MODIFICATION DATE: May 19, 2003

EXPIRATION DATE: August 31, 2009

NUMBER OF WITHDRAWAL POINTS:

Groundwater: 4
Surface Water: 3

USE: Public Water Supply

DAYS OF OPERATION: 365

LOCATION(S):

| <u>Source</u> | <u>Source Code</u> | <u>Latitude</u> | <u>Longitude</u> | <u>Location</u> |
|--------------------------------|--------------------|-----------------|------------------|-----------------|
| Well #1 | 3071000-01G | | | Route 114 |
| Well #1 North Replacement Well | not yet assigned | | | Route 114 |
| Well #1 South Replacement Well | not yet assigned | | | Route 114 |
| Well #2 | 3071000-02G | | | Buxton Lane |
| Middleton Pond | 3071000-01S | | | Lake Street |
| Swan Pond | 3071000-02S | | | Swan Pond Road |
| Emerson Brook Reservoir | 3071000-03S | | | Lake Street |

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SPECIAL CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This Modified Permit authorizes the withdrawal of water for the purpose of serving the residences, schools, businesses, municipal facilities, and institutions in the Towns of Danvers and Middleton, at the rate described below on average over a calendar year. The volume reflected by this rate is in addition to the 3.14 million gallons per day (MGD) previously registered to the permittee through the Water Management Act Program. The Department of Environmental Protection (the Department) will use raw water volumes to assess compliance with the volumes authorized by Danvers' registration and this Modified Permit.

The permitted volume is expressed in millions of gallons, both as an average daily withdrawal rate per year, and as a total annual withdrawal volume for each period of the term of this Modified Permit.

Withdrawals are authorized as follows:

| | | | <u>Daily Average (MGD)</u> | <u>Total Annual (MGY)</u> |
|--------------|-----------|--------------|------------------------------------|-----------------------------------|
| Period One | | | | |
| Years 2-5 | 2/15/1991 | to 8/31/1994 | 0.56 | 204.40 |
| Period Two | | | | |
| Years 6-10 | 9/1/1994 | to 8/31/1999 | 0.56* | 204.40 |
| Period Three | | | | |
| Years 11-14 | 9/1/1999 | to 5/18/2003 | 0.69 | 251.85 |
| Period Four | | | | |
| Years 15-20 | 5/19/2003 | to 8/31/2009 | 0.58* | 211.70 |

* Because actual withdrawal volumes have been significantly below allocated amounts and there is insufficient water available in the Ipswich River Basin to support increased withdrawals, the Department held Danvers' permitted withdrawal volumes to the volume originally allocated for Period One. The permitted volume has been increased slightly in Period Four to address the change from finished water to raw water as the means of assessing compliance.

If, for any year beginning with calendar year 2004, overall water use by the Town of Danvers exceeds 3.35 MGD (the authorized withdrawal volume of 3.72 MGD, minus the 0.37 MGD allotted to Middleton via the Danvers/Middleton water contract) on an average annual daily basis, then on or before March 1st of the following year, Danvers shall submit to the Department for its review and approval a plan and schedule for implementing a water bank. If for any year beginning with calendar year 2004, overall water use by the Town of Middleton exceeds its contracted volume of 0.37 MGD on an average annual daily basis, then on or before March 1st of the following year, Middleton shall submit to the Department for its review and approval a plan and schedule for implementing a water bank. Thereafter, the Town that has exceeded the volume stated herein shall implement the plan and schedule as approved by the Department.

At a minimum, a water bank implemented by either Town shall provide for keeping at least two gallons of water within the basin for every gallon of water demand added to the system. The

water bank requirement applies even if either Town exceeds the volume stated herein on an average annual daily basis by an amount that is less than the threshold volume. Any plan and schedule for implementing a water bank prepared by either Town shall include a plan and schedule to evaluate options, such as purchase and/or development of out-of-basin sources or enhanced water conservation, that would enable the Town to return to compliance with the volumes stated herein.

2. Maximum Authorized Daily Withdrawal Volume

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volume listed below without specific advance written approval from the Department.

| Source | Source Code | Daily Maximum (MGD) |
|--------------------------------|------------------|---------------------|
| Well #1 | 3071000-01G | } 0.86 combined |
| Well #1 North Replacement Well | not yet assigned | |
| Well #1 South Replacement Well | not yet assigned | |
| Well #2 | 3071000-02G | 0.98 |
| Middleton Pond | 3071000-01S | Not Applicable |
| Swan Pond | 3071000-02S | Not Applicable |
| Emerson Brook Reservoir | 3071000-03S | Not Applicable |

3. Surface Water Protection

By **May 16, 2005:**

- 1) The Danvers Water Department shall comply with 310 CMR 22.20C(1)(d)4. to develop a DEP-approved surface water supply protection plan;
- 2) The Town of Middleton shall implement zoning and non-zoning controls that meet the requirements of 310 CMR 22.20C(2) to protect the portion of the Zone A that lies within Middleton; and
- 3) The Danvers Water Department shall demonstrate that it has used its best efforts to get the Towns of North Reading and North Andover to implement zoning and non-zoning controls that meet the requirements of 310 CMR 22.20C(2) to protect the portions of the Zone A that lie within those Towns. For additional information or for assistance with developing a local protection plan or land use controls, contact the Department's Drinking Water Program.

4. Zone of Contribution (Zone II or Zone III) Delineations

Department records show that Well #1 (3071000-01G) and Well #2 (3071000-02G), including the Well #1 replacement wells, have a DEP approved Zone II delineation. Therefore, no further Zone II work is required as a condition of this Modified Permit.

5. Wellhead Protection

Department records show that the Danvers Water Department meets the requirements of 310 CMR 22.21(2) for Well #1 (3071000-01G) and Well #2 (3071000-02G), including the Well #1 replacement wells. Therefore, no additional wellhead protection work is required as a condition of this Modified Permit.

6. Firm Yield of Surface Water Supplies

The Department hereby accepts the Firm Yield of **3.51 MGD** for Middleton Pond, Swan Pond, and Emerson Brook Reservoir, based on the 20-year drought, as determined by SEA Consultants, Inc., using the Department-developed Firm Yield Estimator Version 1.0 software.

Withdrawals from Middleton Pond, Swan Pond, and Emerson Brook Reservoir, as measured at the raw water influent to the Middleton Pond Water Treatment Plant, shall not exceed 3.51 MGD as an annual average.

7. Streamflow Maintenance

Operation of Wells Nos. 1 (including its replacement wells) and 2 shall be restricted in accordance with the Groundwater Withdrawals Operations Chart in Appendix A. This chart has been modified from Tables 8 and 9 in Danvers' March 2002 "Water Supply Operations Plan" to reflect new streamflow thresholds for the Ipswich River Basin. These thresholds are expressed in cubic feet per second (cfs) at the U.S. Geological Survey (USGS) gauge in South Middleton. The chart indicates when the wells must be shut off, pumped only every other day, or may be used at their full approval rates. The Water Supply Operations Plan shall be modified 1) in accordance with this chart; and 2) to include a clause regarding maintenance, such that multiple sources shall not simultaneously be rendered inoperable for maintenance purposes. Danvers' response to the 2001-02 drought was hindered by Wells Nos. 1 and 2 both being shut down for major upgrade projects.

A permanent staff gauge shall be maintained along the Ipswich River by Well No. 1. Weekly water level measurements shall be collected. Records of the weekly staff gauge measurements shall be kept and submitted to the Department upon request.

8. Streamflow Triggers and Outside Water Use Restrictions

Beginning on June 1, 2003, both Danvers and Middleton shall implement the Required Actions identified in the following table whenever streamflow falls below the levels identified for three consecutive days as measured at the U.S. Geological Survey (USGS) streamflow gauge noted.

| Period | Streamflow Trigger (3 consecutive days below threshold) | Flow Volume (USGS S. Middleton Gauging Station) | Required Action |
|--------|---|---|-----------------|
|--------|---|---|-----------------|

| #01101500) * | | | |
|-----------------------------|-------------|------------|--|
| May 1st – September 30th | < 0.56 cfsm | < 24.9 cfs | Public Notice for Voluntary Water Restrictions |
| May 1st – September 30th | <0.42 cfsm | <18.7 cfs | Implementation of Mandatory Water Restrictions |

cfsm = cubic feet per second per square mile

cfs = cubic feet per second

* The streamflow thresholds set forth above are the mean daily streamflows recorded at the applicable USGS gauge. Should the reliability of flow measurements at the South Middleton gauging station be so impaired as to question its accuracy, then the Modified Permit holder may request for the Department's review and approval, that the trigger mechanism be transferred to the USGS Ipswich River at Ipswich gauge, #01102000. The implementation of restrictions will be triggered by the same cfsm values, which translate to a flow of 70.0 cfs for voluntary restrictions, and 52.5 cfs for mandatory restrictions. Should the Department become aware of concerns about the reliability of either gauge, it may upon immediate notification to the Modified Permit holder transfer the measurement point to an alternate gauge. The Department reserves the right to require use of a different gauge.

Required Actions, whether voluntary or mandatory restrictions, require the filing of a public notice in a local newspaper within 5 business days of the date that the required action is triggered.

A copy of each notice as published shall be forwarded to the Department within 10 business days of publication. Each notice shall at a minimum include:

1. the streamflow value triggering the required notification;
2. the need to limit water use, especially nonessential outside water use, to protect streamflow for aquatic life and to ensure a sustainable drinking water supply;
3. ways individual homeowners can limit water use, especially nonessential outside water use;
4. in the case of mandatory restrictions, a detailed description of the restrictions and the penalties for violating the restrictions.

At a minimum, the mandatory restrictions shall limit nonessential outside water use to hand held hoses only and include hourly restrictions on nonessential outside water use. At a minimum, hourly restrictions shall avoid water use during the hours 9 AM – 5 PM when evapotranspiration rates are typically the highest. Notwithstanding the foregoing, irrigation of public parks and recreational fields by means of automatic sprinklers equipped with moisture sensors or similar control technology may also be permitted outside of the hours 9AM – 5 PM. For the purpose of this Modified Permit, the term “nonessential outside water use” is defined to include those uses that do not have health or safety impacts, are not required by regulation, and are not needed to meet the core functions of a business or other organization. Each Town shall have the authority to enforce mandatory restrictions, including the authority to assess penalties or impose fines for violations.

Each Town shall implement and, in the case of mandatory restrictions, enforce the restrictions until streamflow exceeds for seven consecutive days the applicable streamflow threshold set forth in the table above.

In order to evaluate the effectiveness of the restrictions on nonessential outside water use, the Department requires that each Town submit, along with its Annual Statistical Reports, a report documenting all actions taken by the Town to implement and enforce the restrictions on nonessential outside water use, including without limitation the dates the restrictions on nonessential outside water use were in place, the streamflow threshold that triggered the restrictions, the restrictions imposed, and the Town's efforts to enforce the restrictions, including the names and addresses of those against whom action was taken and any fines or penalties imposed.

By **June 1, 2004**, the Towns of Danvers and Middleton shall each adopt outside water use bylaws, ordinances, regulations, or alternative authority that will enable each Town to legally enforce limitations on nonessential outside water use when necessary. The May 2002 *Guide to Lawn and Landscape Water Conservation* by the Massachusetts Water Resources Commission, which includes the latest version of the Department's Model Water Use Restriction Bylaw, is available on the Internet at <http://www.state.ma.us/envir/mwrc/pdf/LawnGuide.pdf>.

9. Ipswich River Basin Performance Standards

Beginning with calendar year 2004, the Towns of Danvers and Middleton shall each meet the following performance standards:

Performance Standard for Unaccounted for Water

Unaccounted for water shall not exceed 10% of overall water use.

Danvers' Annual Statistical Report shall provide a detailed assessment of its unaccounted for water. (The design of the water system does not allow this amount to be determined individually for the two Towns.) Unaccounted for water is defined by the Massachusetts Water Resources Commission as the difference between water pumped or purchased and water that is metered or confidently estimated. Unaccounted for water shall include water that cannot be accounted for due to meter problems, unauthorized hydrant openings, unavoidable leakage, recoverable leakage, illegal connections, standpipe overflows, and fire protection.

The need for water main flushing and the use of water in construction or meter calibration shall be metered or estimated as appropriate to assist in determining actual demand. Volumes flushed to waste shall be reported annually on Danvers' Annual Statistical Report; Middleton shall provide its determination of the volume flushed to waste in Middleton to Danvers, for inclusion on the Annual Statistical Report.

Performance Standard for Residential Per Capita Water Use

Residential Per Capita Water Use shall not exceed 65 gallons per day.

Danvers and Middleton shall each report their residential gallons per capita per day and the calculation used to derive that figure as part of their Annual Statistical Reports. The residential gallons per capita per day is the total volume of residential water use in gallons divided by the population served. The source of the data used to establish the service population, and the year in which this data was developed, shall be provided. If either Town fails to meet the performance standard for keeping residential per capita water use at or below 65 gallons per day, the Department may require that Town to implement restrictions on nonessential outside water use that are more stringent than the restrictions set forth in Special Condition #8.

Performance Standard for Seasonal Water Use

Water use between May 1st and September 30th shall not exceed the seasonal cap of 501.84 million gallons for Danvers and 85.68 million gallons for Middleton. To stay within this cap,

water use from May 1st through September 30th shall be kept at or below an average daily volume of 3.28 MGD for Danvers and 0.56 MGD for Middleton. If either Town exceeds this seasonal cap, the Department may require that Town to implement more stringent restrictions on nonessential outside water use than those set forth in Special Condition #8.

Performance Standard for Restricting the Use of Unregulated Irrigation Wells

The Department has been informed that within the Ipswich River Basin there has been an increase in the number of wells that are not subject to regulation under the Water Management Act and are used in whole or in part for irrigation purposes (hereinafter “unregulated irrigation wells”). To avoid a further increase in the number of such wells, the Department determined that because of the stressed nature of the Ipswich River, it is appropriate that the communities located in the Ipswich River Basin make the use of unregulated irrigation wells subject to the restrictions on nonessential outside water use that are triggered by streamflow thresholds, that are required by this Modified Permit and that apply to customers of the public water system.

Most of the Town of Danvers is outside the Ipswich River Basin, so regulation of unregulated irrigation wells in Danvers would not result in water being kept in the Ipswich River Basin. The Department requires that Middleton submit, along with its Annual Statistical Report, a report documenting all actions taken by Middleton to make unregulated irrigation wells subject to the restrictions on nonessential outside water use triggered by streamflow thresholds that are required by this Modified Permit, and that apply to customers of the public water system, including any actions taken to enforce these restrictions against the owners or operators of unregulated irrigation wells and any fines or penalties imposed. If, in any calendar year beginning 2005, Middleton, on or before May 1st of that year, fails to restrict the use of unregulated irrigation wells as provided herein, Middleton shall implement and enforce the restrictions on nonessential outside water use triggered by the streamflow thresholds set forth below in place of the streamflow thresholds set forth in Special Condition #8.

| Period | Streamflow Trigger (3 consecutive days below threshold) | Flow Volume (USGS S. Middleton Gauging Station #01101500) * | Required Action |
|---|---|--|---|
| May 1 st – September 30 th | < 0.56 cfsm | < 24.9 cfs | Public Notice for Voluntary Water Restrictions |
| May 1 st – September 30 th | <0.42 cfsm | <18.7 cfs | Implementation of a Total Ban on Nonessential Outside Water Use |

cfsm = cubic feet per second per square mile

cfs = cubic feet per second

10. Enhanced Water Conservation Plan

If, in any year beginning with calendar year 2004, Danvers and/or Middleton fails to comply with the Performance Standards for Residential Per Capita Water Use and/or Seasonal Water Use, that Town shall develop and implement an enhanced water conservation plan for the following calendar year. For any year in which either Town is required to develop and implement an enhanced water conservation plan, that Town shall submit, along with its Annual Statistical Report, a report documenting all actions taken by the Town to develop and implement the enhanced water conservation plan.

The enhanced water conservation plan may include, but is not limited to, the items listed below:

- Adoption and enforcement of a bylaw or other regulation to require moisture sensors or similar control technology on automatic sprinklers
- Adoption and enforcement of a bylaw or other regulation to limit the amount of land clearing for the creation of lawns
- Adoption and enforcement of a bylaw or other regulation to promote infiltration of stormwater to recharge groundwater at a rate 1.5 times the volume of recharge for new development projects and a rate of 1.0 times the volume of recharge for redevelopment projects for the appropriate hydrologic group, as identified in Standard 3 of the DEP Stormwater Management Standards
- Irrigation of recreational fields and parks in accordance with the Water Resources Commission's May 2002 *Guide to Lawn and Landscape Water Conservation*
- Encouragement of the use of cisterns or rain barrels for outside watering thru the use of a rebate or at-cost program
- Enhanced public education outreach
- Purchase and/or development of out-of-basin sources

At a minimum, the enhanced water conservation plan shall meet the requirements set forth below.

- If Danvers or Middleton fails to comply with the performance standard for keeping residential per capita water use at or below 65 gallons per day, the enhanced water conservation plan shall include the implementation of a program to make water saving devices such as faucet aerators, low flow shower heads, and toilet displacement bottles/dams available to its customers at cost and to provide rebates or other incentives for the purchase of low flow appliances (washing machines, dishwashers, and toilets) and the installation of moisture sensors or similar control technology on irrigation systems.
- Any enhanced water conservation plan required by this Modified Permit shall include (1) submission of a report that evaluates the effectiveness of an increasing block rate or a seasonal rate as a tool for encouraging water conservation; (2) implementation of any changes to the current rate structure that will encourage water conservation; and (3) notification to the Department of the changes along with the reason for these changes. Any enhanced water conservation plan for Danvers shall also evaluate Danvers' practice of allowing second meters for irrigation and recommend whether this practice should be changed or discontinued.

11. Control of Unaccounted for Water

At a minimum, Danvers shall take the actions listed below to meet the performance standard for keeping unaccounted for water at or below 10%.

Metering

- o Continue the ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by your customers to within 2%. Such plan shall continue to include provision for, and scheduling of, placing sufficient funds in the annual water department budget to recalibrate, repair, or replace meters as necessary.

- o Continue to calibrate all master meters on an annual basis.

Leak Detection

- o Continue to conduct a full leak detection survey at least every three years. In addition, a leak detection survey of the entire distribution system shall be performed whenever unaccounted for water exceeds 10% of overall water use, or the percentage of unaccounted for water increases by 5% or more (for example, an increase from 2% to 8%) over the percentage reported on Danvers' Annual Statistical Report for the prior calendar year. On or before December 31 of any calendar year in which a leak detection survey takes place, Danvers shall submit to the Department for its review a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, and the estimated water savings as a result of the repair.

Leak Repair

- o Leak repair reports shall be available for inspection by the Department.
- o Leaks are to be fixed as soon as possible, including leaks in any water pipes up to the service meter. In no event shall any leak remain unrepaired more than seven (7) days after detection.

12. Reporting Requirements

The Annual Statistical Report filed by Danvers each year shall include information on the amount of water supplied to the Middleton water distribution system in accordance with 310 CMR 22.15(5)(a)2. Daily pumping records from the wells and daily streamflow records shall be kept and submitted to the Department as attachments to the Annual Statistical Reports.

Danvers shall also report both the raw and finished water volumes for the entire water system. For individual water sources in the water system, raw water volumes shall be reported.

13. Large Water User Conservation Program

Danvers shall implement a program to reduce water use by the ten (10) largest customers in Danvers and the five (5) largest customers in Middleton. On or before **March 1, 2005**, Danvers shall report on the effectiveness of this program. Upon receipt of this report, the Department will take whatever action it deems appropriate to promote the interests of the Water Management Act, including without limitation requiring the Towns to take additional actions to reduce commercial and industrial water use.

14. General Conservation Requirements

Pricing

- o Continue to ensure that water supply system operations are fully funded by water supply system revenues. The pricing system should reflect the full cost of supplying water, including but not limited to:

- administrative costs
- staff salaries, benefits, insurance and pension costs
- distribution system operation, maintenance and repair, including leak detection and repair costs and metering costs
- pumping costs and utilities
- treatment costs
- capital replacement costs, capital depreciation and debt service
- costs incurred for water conservation programs and public education programs
- watershed or wellhead purchase and/or protection costs and land acquisition
- emergency planning

Plumbing

- o Each Town shall enforce the March 1, 1989 plumbing code for new construction and building rehabilitation requiring installation of water saving devices and low flow toilets.
- o By **December 31, 2003**, Middleton and Danvers shall each submit to the Department a status report detailing which public buildings have been retrofitted with water saving devices (faucet aerators, low flow shower heads and toilet displacement bottles/dams) and which buildings have yet to be retrofitted, along with a schedule to complete the retrofitting by May 16, 2005. On or before **May 16, 2005**, Middleton and Danvers shall each complete the retrofit of all public buildings and notify the Department in writing that the retrofit is complete.

Education

- o Danvers and Middleton shall each continue its ongoing education program which includes: public service announcements, school materials, speakers for community groups, conservation information center, and public space advertising (including Town Hall exhibits). This public education program shall emphasize:
 - all the costs of providing water
 - that investments in efficiency and conservation will provide consumers with long-term savings
 - how water use fluctuates seasonally throughout the year
 - the environmental benefits of reducing water demand
- o Bill stuffers with water conservation tips or water saving messages should be included at least annually with customer's water bills, or as a separate mailing. Copies of this information shall be available to the Department upon request.

GENERAL CONDITIONS

1. **Duty to Comply** The permittee shall comply at all times with the terms and conditions of this Modified Permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw up to the authorized volume so as not to impair the purposes and interests of the Act.

3. **Entry and Inspections** The permittee or the permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property for the purpose of determining compliance with this Modified Permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this Modified Permit are subject to restriction in any water emergency declared by the Department pursuant to MGL c 21G ss 15-17, MGL c 150 ss 111, or any other enabling authority.
5. **Transfer of Permits** This Modified Permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The permittee shall submit annually, on a form provided by the Department (the Annual Statistical Report), a certified statement of the withdrawal, such report to be received by the Department by February 28th of each year. Such report must be mailed or hand delivered to:

Department of Environmental Protection
Water Management Program
One Winter Street, 6th Floor
Boston, MA 02108
7. **Duty to Maintain Records** The permittee shall be responsible for maintaining monthly withdrawal records.
8. **Metering** All withdrawal points included within the Modified Permit shall be metered. Meters shall be calibrated annually.

APPEAL RIGHTS AND TIME LIMITS

This permit modification is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing under the provisions of M.G.L. c. 30A. Any such request must be made in writing, by certified mail and received by the Department within twenty-one (21) days of the date of receipt of this Modified Permit. Only the portions of this Modified Permit that reflect a modification of Danvers' current permit may be the subject of an appeal, as the period for appealing provisions within Danvers' current permit has expired.

No request for an appeal of this Modified Permit shall be validly filed unless a copy of the request is sent by certified mail, or delivered by hand to the local water resources management official in the city or town in which the withdrawal point is located; and for any person appealing this decision, who is not the permit holder, unless such person notifies the permit holder of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. For a person who is not the permit holder, the request must include a clear and concise statement of how that person is aggrieved by the issuance of this Modified Permit.

FILING FEE AND ADDRESS

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person, seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts which support the claim of undue hardship.

NO WITHDRAWAL AUTHORIZED HEREIN SHALL EXCEED THE SAFE YIELD OF THE BASIN AS DETERMINED BY THE DEPARTMENT.

NO WITHDRAWAL IN EXCESS OF 100,000 GALLONS PER DAY OVER THE REGISTERED VOLUME (if any) SHALL BE MADE FOLLOWING THE EXPIRATION OF THIS PERMIT, UNLESS BEFORE THAT DATE THE DEPARTMENT HAS RECEIVED A RENEWAL PERMIT APPLICATION PURSUANT TO 310 CMR 36.00.

Appendix A

GROUNDWATER WITHDRAWALS OPERATIONS CHART

Well No. 1 — 0.86 MGD (600 gpm)
Well No. 2 — 0.98 MGD (680 gpm)

| Month | Shut Off | Alternate Day Pumping | Daily Pumping |
|-----------|------------|-----------------------|---------------|
| January | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| February | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| March | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| April | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| May | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| June | < 18.7 cfs | 18.7 – 29.8 cfs | > 29.8 cfs |
| July | < 18.7 cfs | 18.7 – 29.8 cfs | > 29.8 cfs |
| August | < 18.7 cfs | 18.7 – 29.8 cfs | > 29.8 cfs |
| September | < 18.7 cfs | 18.7 – 29.8 cfs | > 29.8 cfs |
| October | < 18.7 cfs | 18.7 – 29.8 cfs | > 29.8 cfs |
| November | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |
| December | < 18.7 cfs | 18.7 – 44.5 cfs | > 44.5 cfs |

These thresholds are based upon flow at the U.S. Geological Survey Ipswich River at South Middleton gauge, which has a drainage area of 44.5 square miles. Therefore, 18.7 cfs = 0.42 cfs/m, 29.8 cfs = 0.67 cfs/m, and 44.5 cfs = 1.0 cfs/m.

cfs = cubic feet per second

cfs/m = cubic feet per second per square mile of drainage basin